Earth Science

Cloud Enabled Scientific Collaborative Research Environment (CESCRE)
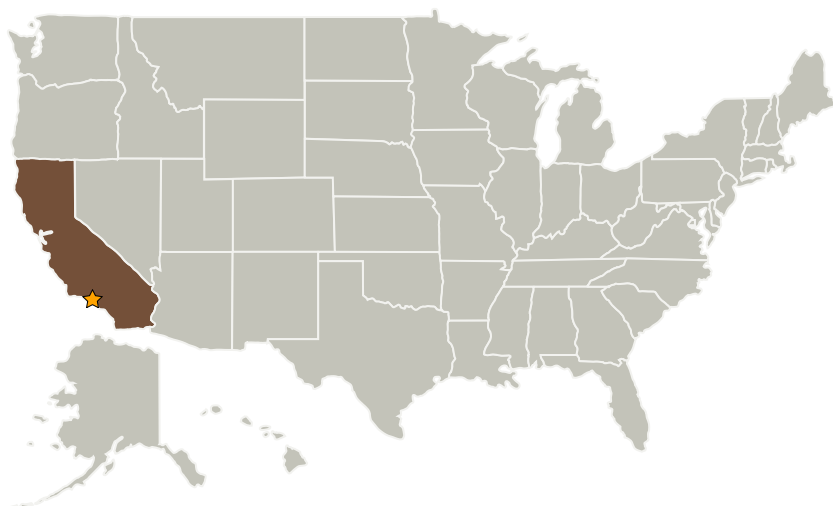
Completed Technology Project (2012 - 2014)

Project Introduction

The Cloud Enabled Scientific Collaborative Research Environment Project will enable scientists to interactively chsare algorithms, software using the following approach: 1. Integrate at least two scientific packages into commercial cloud enironments such as Amazon, Microsoft, or others. 2. Create a virtual meching image catalog and a data catalog to streamline discovery and integration of available scientifg algorithms, raw and processed data. 3. Creat an Eclipse-based Integrated Develpment Environment as a front end to develop, execute, and monitor cloud based workflows.
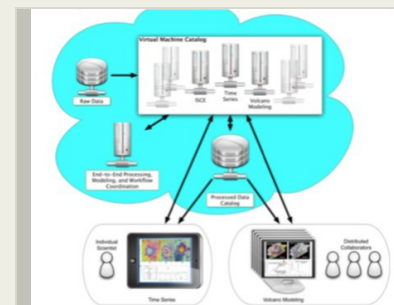
Primary U.S. Work Locations and Key Partners

Organizations Performing Work	Role	Type	Location
⭐Jet Propulsion Laboratory(JPL)	Lead Organization	NASA Center	Pasadena, California
United States Geological Survey(USGS)	Supporting Organization	US Government	Menlo Park, California

Primary U.S. Work Locations
California

Image

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Organizational Responsibility

Responsible Mission Directorate:

Science Mission Directorate (SMD)

Lead Center / Facility:
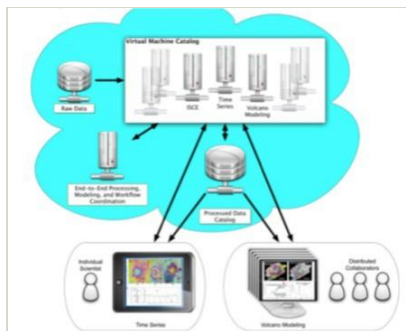
Jet Propulsion Laboratory (JPL)

Responsible Program:

Earth Science

Images

Cloud Enabled Scientific Collaborative Research Environment Project
Image
(https://techport.nasa.gov/image/20857)

Project Management

Program Director:

George J Komar

Principal Investigator:

Mark W Powell

Co-Investigators:
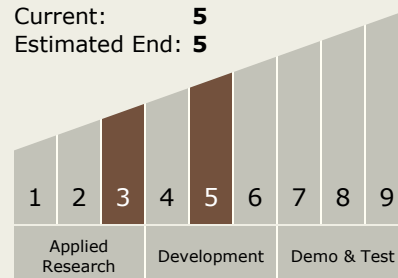
Tomas J Soderstrom
Paul A Rosen
Eric M Gurrola
Paul R Lundgren

Technology Maturity (TRL)

Start: **3**
Current: **5**
Estimated End: **5**

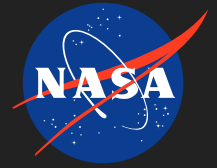| 1	2	3	4	5	6	7	8	9
	Applied Research			Development			Demo & Test	

Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
  └ TX11.4 Information Processing
    └ TX11.4.4 Collaborative Science and Engineering

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https://techport.nasa.gov/view/34754

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Target Destination
Earth